26. The method of claim 24, wherein the inert gas is He.

28. The method of claim 25, wherein the inert gas is He.

30. (Amended) The method of claim 24, wherein the exposing the first layer to the plasma comprises flowing the inert gas into a processing chamber at a rate of about 100 to about 4000 sccm, establishing a chamber pressure between about 1 to about 12 Torr, and applying RF power to an electrode of the processing chamber to provide a power density of about 0.7 to about 11 W/in^2.

31. (Amended) The method of claim 24, wherein the exposing the first layer to the plasma is performed in the same processing chamber as the depositing the first layer.

32. (Amended) The method of claim 25, wherein the exposing the first layer to the plasma is performed in the same processing chamber as the depositing the first layer.

33. (Amended) The method of claim 26, wherein the first layer comprises silicon carbide and the exposing the first layer to a plasma does not substantially change a composition of the first layer as detected by a fourier transform infrared analysis.

34. (Amended) A method of processing a semiconductor substrate, comprising:

depositing a first layer on a semiconductor substrate, the first layer comprising a material selected from the group consisting of SiCOH and SiC;

treating the first layer with a plasma consisting essentially of an inert gas; and

depositing a second layer over the first layer.

35. The method of claim 34, wherein the treating the first layer improves the oxidation resistance of the first layer.

36. The method of claim 34, wherein the treating the first layer prevents delamination of the second layer from the first layer.

37. The method of claim 34, wherein the first layer comprises silicon carbide.

38. The method of claim 34, wherein the inert gas is He.

40. The method of claim 37, wherein the inert gas is He.

42. (Amended) The method of claim 34, wherein the treating the first layer comprises exposing the first layer to the plasma generated by flowing the inert gas into a processing chamber at a rate of about 100 to about 4000 sccm, establishing a chamber pressure between about 1 to about 12 Torr, and applying RF power to an electrode of the chamber to provide a power density of about 0.7 to about 11 W/in^2.

43. (Amended) The method of claim 34, wherein the treating the first layer and the depositing the first layer are performed in a single process chamber.

44. (Amended) The method of claim 37, wherein the treating the first layer and the depositing the first layer are performed in a single process chamber.

45. (Amended) The method of claim 34, wherein the treating the first layer does not substantially change a composition of the first layer.

Please add the following new claims:

46. (New) A method of treating a carbon containing layer selected from the group consisting of organic polymeric materials, αC, αFC, SiCOH, and SiC deposited on a semiconductor substrate, comprising exposing the carbon containing layer to a plasma consisting essentially of an inert gas to improve adhesion and oxidation resistance of the carbon containing layer.

47. (New) The method of claim 46, wherein the inert gas is He.

48. (New) The method of claim 46, wherein the carbon containing layer comprises silicon carbide.